APPENDIX C:

ISSUES TRACKING MATRIX

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TABLE C-1 EIS Issues Tracking Guide[a]

Issue Emerging from the EA Court Challenge/EIS Scoping	Summary of Resolution of the Issue	Where Issue Is Addressed in the EIS
Challenge		
1. *Potential for Public Controversy:* Substantial questions were raised in comments submitted on the EA that raised a controversy over the potential impacts of the proposed action.	This EIS was prepared in large part to address the questions that gave rise to the controversy.	Throughout. See citations below to specific questions.
2. *Water Impacts – Salton Sea:* The conclusion in the EA that flow and salinity impacts to the Salton Sea would be too low to measure was insufficient. Such impacts must be computed.	Impacts of flow reductions and salinity increases have been analyzed in terms of calculated increases in these parameters as well as on the elevation of the Salton Sea, its area, volume, and the advancement of the time to reach a critical salinity level of 60,000 mg/L.	Impacts of plant operations on the Salton Sea are presented in Section 4.2.4.2.
3. *Impacts from NH_3 and CO_2:* Questions remain concerning contributions of NH_3 emissions to secondary PM_{10} formation and whether NH_3 concentrations exceed reference levels in the U.S. Also, plant emissions of CO_2 need to be evaluated under NEPA.	Impacts from plant NH_3 emissions were analyzed in terms of maximum increases in ambient air concentrations in Imperial County as compared to a safe reference concentration and in terms of contributions to secondary PM_{10} formation from chemical reactions of power plant NH_3 and NO_x in the atmosphere.	Production of secondary PM_{10} from NH_3 emissions is discussed in Section 4.3.4.4.2; an assessment of CO_2 emissions is presented in Section 4.3.4.4.3.
4. *Range of Alternatives:* The EA did not evaluate reasonable and feasible alternatives, namely (1) state-of-the-art emission controls on power plants, or dry cooling or wet-dry cooling; and (2) mitigation through offsets in existing sources.	The EIS analyzes alternatives encompassing the addition of further CO and NO_x controls on export turbines at the power plants and alternatives that consider dry or wet-dry cooling of the power plants.	The alternative technologies alternative is described in Section 2.3. Resource area impacts are generally discussed in the alternative technologies sections (e.g., 4.1.5, 4.2.5, etc.)

TABLE C-1 (Cont.)

Issue Emerging from the EA Court Challenge/EIS Scoping	Summary of Resolution of the Issue	Where Issue Is Addressed in the EIS
5. *Cumulative Impacts:* The EA did not adequately assess the cumulative impacts of power plant operations on the New River and Salton Sea, nor did it adequately consider the impacts of specific future power plants in the region mentioned by commentors.	Cumulative impacts on water resources and air quality in the border region are analyzed in the EIS. Impacts on the quantity and quality of water in the New River and Salton Sea from the projects were reviewed in the context of broader demands on the same resources, such as the water transfer project. Impacts to air quality from any verifiable future power plants or other industries with air impacts were analyzed after a careful review of planned or proposed projects in the region.	A cumulative impacts analysis is presented in Chapter 5. Cumulative impacts to water resources are discussed in Section 5.4.2. Cumulative impacts to air quality are discussed in Section 5.4.3. A summary of impacts is provided in Table 5.4-4.
EIS Scoping		
1. Adverse impacts to the New River and Salton Sea from increased TDS and reduced DO.	Impacts to the New River and Salton Sea are analyzed in terms of changes in calculated TDS loads and concentrations and measured DO concentrations.	Impacts to the New River are presented in Section 4.2.4.1 and to the Salton Sea in Section 4.2.4.2.
2. Adverse air quality impacts from plant emissions of NO_x, CO, PM_{10}, and NH_3.	Increases in ambient air concentrations in Imperial County are modeled using EPA's AERMOD model and compared to EPA SLs for adverse air quality impacts for NO_x, CO, PM_{10}, and NH_3. Impacts on the concentrations of the secondary air pollutants O_3 and PM_{10} are also analyzed.	Section 4.3.

TABLE C-1 (Cont.)

Issue Emerging from the EA Court Challenge/EIS Scoping	Summary of Resolution of the Issue	Where Issue Is Addressed in the EIS
3. Human health impacts, with particular concern for asthma sufferers.	Human health impacts are analyzed in terms of exposure to EMF from the transmission lines and from air pollutants emitted from the power plants. Exposure to EMF to nearby residents is computed from conservative application of standard field strengths for power lines. Exposure to plant-related air pollutants is analyzed in terms of EPA SLs and through a review of the types of health effects that are associated with the pollutants and the regional health status with respect to these health effects. In addition, a human health risk assessment was performed for exposure to hazardous air pollutants and NH_3.	Human health impacts from exposure to EMF and to plant-related air pollutants are discussed in Section 4.11 and Appendix H.
4. Consideration of mitigation measures to offset plant emissions.	A mitigation measures alternative is analyzed in the EIS. Mitigation measures analyzed are confined to those that affect air quality. Water resource offsets are not considered because all water in the region is accounted for, that is, taking water for one purpose would remove it from another established, purpose. Air quality offsets from road paving and engine and fuel conversions in vehicles are analyzed.	A mitigation measures alternative is analyzed under the various resource area analyses in Section 4. Specific discussions of air quality offsets are presented in Sections 2.4 and 4.3.6.
5. Consideration of alternative technologies, including dry cooling, wet-dry cooling, and CO and NO_x controls on power plants.	The EIS analyzes an alternative that encompasses power plants fitted with further air pollution controls and dry or wet-dry cooling. Air pollution modeling included cases with plants equipped with full NO_x and CO controls. In addition, impacts on water and air from the use of dry or wet-dry cooling are analyzed.	Impacts on water resources are discussed in Section 4.2.5. Impacts on air quality are discussed in Section 4.3.5, and impacts on biological resources are discussed in Section 4.4.5.

TABLE C-1 (Cont.)

Issue Emerging from the EA Court Challenge/EIS Scoping	Summary of Resolution of the Issue	Where Issue Is Addressed in the EIS
6. Ecological impacts from salinity increases in the New River and Salton Sea, including recreational fishing in the Sea.	Impacts to biological resources associated with the New River, Salton Sea, and experimental wetlands along the New River from water use at the power plants are analyzed in the EIS. Impacts on recreational fish populations in the Salton Sea are included in the analysis.	Ecological impacts from changes in water quality and volume are discussed in Section 4.4.
7. Visual impacts of the transmission lines.	Visual impacts from construction of the transmission lines along three possible alternative routes are analyzed in the EIS in terms of regional visual setting and from key viewing points using photo simulations.	Visual impacts of construction of transmission lines are discussed in Section 4.8.
8. Environmental justice and cultural resources impacts.	Environmental justice issues are evaluated in the EIS in terms of potential disproportionate impacts of the projects on low-income and minority populations. Impacts to cultural resources from construction of the transmission lines along three alternative routes are assessed in terms of known and expected resources along the respective routes.	Environmental justice issues are analyzed in Section 4.12. Cultural Resources impacts are analyzed in Section 4.5.

[a] Abbreviations: AERMOD = AMS/EPA Regulatory MODel; CO = carbon monoxide; CO_2 = carbon dioxide; DO = dissolved oxygen; EA = environmental assessment; EIS = environmental impact statement; EMF = electric and magnetic fields; EPA = U.S. Environmental Protection Agency; NEPA = National Environmental Policy Act; NH_3 = ammonia; NO_x = nitrogen oxides; O_3 = ozone; PM_{10} = particulate matter with a mean aerodynamic diameter of 10 μm or less; SL = significance level; TDS = total dissolved solids.

TABLE C-2 Summary of Declaration Issues and Resolutions[a]

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Water Impacts	
M. Barrett, plaintiff	*M. Barrett declares that flow in the New River would be reduced by about 6% as the result of the proposed action.*	
	In general, the calculations performed for this EIS are in agreement with this value. The actual reduction at Brawley would be somewhat less, however, because the wetlands are located downstream of the Calexico gage and the New River gains water as it flows northward.	Section 4.2.4.2
	M. Barrett further states that the proposed action would immediately decrease the amount of water flowing through the Brawley wetlands.	
	However, water for the Brawley wetlands is obtained from the New River by pumping; direct flow from the river is not used. The reduction in New River flow at the wetlands produced by the proposed action would not prevent pumping the same amount of water (about 7 ac-ft/yr) from the river even under low-flow conditions.	Section 4.2.4.2
	M. Barrett additionally states that the proposed action would increase the TDS at the location of the wetlands by about 6%.	
	The calculations performed for this EIS are in agreement with her stated value.	Section 4.2.4.2
	M. Barrett states that the proposed action would reduce flow to the New River and the Salton Sea.	
	The calculations performed for this EIS support her statement. Flow in the New River would be reduced by about 6%, and inflow to the Salton Sea would be reduced by about 0.8%. These reductions would be well within the normal variability of the systems.	Sections 4.2.4.2 and 4.2.4.2

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Water Impacts	
K. Collins, plaintiff	*In her declaration, K. Collins states that the proposed action would decrease water in the New River and increase its salinity.*	
	Calculations performed for this EIS are in agreement with her statement.	Section 4.2.4.1
	K. Collins further states that the proposed action would increase the concentration of industrial wastes if the power plants evaporate the treated water normally disposed of in the river. Water released from the Zaragoza Oxidation Lagoons undergo, at most, primary treatment (i.e., settling).	
	Calculations performed for this EIS indicate that, except for TDS and selenium, water quality parameters in the New River would be improved by the proposed action (e.g., decreased COD, BOD, TSS, phosphorus, etc.).	Section 4.2.4.1
DOI	*The DOI report summarizes the current status of alternatives for reducing salinity and of elevation control for the Salton Sea. Information from this report was used in characterizing the affected environment for the Salton Sea. Impacts to the Salton Sea from the proposed action were discussed as part of the EIS process.*	Sections 3.2.1.3 and 4.2.4.2
W. Powers, plaintiff	*W. Powers states that the proposed action would immediately reduce the flow of water in the New River and increase its salinity by as much as 10% at the U.S.-Mexico border.*	
	Calculations performed for this EIS indicate that similar changes would occur, but the magnitude would be less, approximately 6%.	Section 4.2.4.1
T.J. Kirk, plaintiff	*T.J. Kirk states in his declaration that the proposed action would reduce flow to the Salton Sea and increase its salinity.*	
	Calculations performed for this EIS are in agreement with this statement. With both plants operating, inflow to the Sea would be reduced by about 0.8%, and its TDS would increase by about 0.14%. The rate of TDS increase would also increase by about 0.19%. This increase in rate would result in a TDS value of 60,000 mg/L in about 36.06 years, rather than 36.07 years, a difference of about 4 days. This small change in time is beyond the accuracy of the model and the input parameter values used to predict the changes.	Section 4.2.4.2

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Water Impacts	
J.A. Olson, plaintiff	*J.A. Olson declares that the proposed action would shrink the size of the Salton Sea and increase its salinity.*	
	Calculations performed for this EIS are in agreement with this statement. The volume of the Sea would decrease by about 0.14%, and its salinity would increase by the same amount. Its elevation would decrease by about 0.05 ft (0.02 m), and about 97 acres (39 ha) would be lost in surface area. Cumulatively, impacts of the proposed action would be a fraction of the impacts to the Sea resulting from decreased inflow to the system (approximately 32% in the short term, and 12% in 2022, when the San Diego water transfer projects ramp up to a value of up to 200,000 ac-ft/yr).	Sections 4.2.4.2 and 5.4.2
J. Angel, plaintiff	*J. Angel declares that the proposed action would increase TDS and reduce flow to the Salton Sea and New River.*	
	The calculations performed for this EIS are in agreement with this statement. The volume of the Sea would decrease by about 0.14% due to a reduction in flow from the New River, and the salinity of the Sea would increase by the same amount. Its elevation would decrease by about 0.05 ft (0.6 in.), and about 97 acres (39 ha) would be lost in surface area. Cumulatively, impacts of the proposed action are a fraction of the impacts to the Sea resulting from decreased inflow to the system (approximately 32% in the short term, and 12% in 2022, when the San Diego water transfer projects ramp up to a value of up to 200,000 ac-ft/yr).	Sections 4.2.4.2 and 5.4.2
	The proposed action would also decrease the flow in the New River, as declared by J. Angel. At the Calexico gage, flow would be reduced by about 5.9%; at the Westmorland gage, flow would be reduced by about 2.3%. Both of these reductions are well within the annual variability of flows measured by the USGS.	Section 4.2.4.1
	Because of a reduction in flow and discharge of power plant water that was initially treated from the Zaragoza Oxidation Lagoons prior to use, the annual TDS load to the New River would be decreased; however, the annual TDS concentration in the river would increase by about 6% because of reduced flow in the river and TDS values in the power plant effluent. At the same time, TSS, BOD, COD, and phosphorus loads in the New River would decrease by 2.3, 5.8, 17.0, and 7.5%, respectively. All of these parameter changes are well within the annual variability observed by measurement.	Section 4.2.4.1

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Water Impacts	
T.J. Kirk, plaintiff	*T.J. Kirk, in this declaration, states that reductions in New River flow would increase the TDS in the Salton Sea, reduce its area, and decrease its elevation.*	
	The calculations performed for this EIS are in agreement with this statement. However, the changes calculated for this EIS were less than those described in the declaration. The volume of the Sea would decrease by about 0.14% due to a reduction in flow from the New River, and the salinity concentration of the Sea would increase by the same amount. Its elevation would decrease by about 0.05 ft (0.6 in.), and about 97 acres (39 ha) would be lost in surface area. In either case, the values calculated are well within the uncertainty of the Sea's actual TDS concentration.	Section 4.2.4.2
T. Hromadka, Intervenors	*T. Hromadka declared that water lost to power plant operations in the New River would be replaced by an increase in groundwater inflow.*	
	Calculations performed for this EIS indicate that the change in water depth at the Calexico gage caused by plant operations would be on the order of 0.13 ft (about 0.04 m). In a gaining stream (i.e., one in which the quantity of water flowing in the stream increases in the downstream direction), such as the New River, as the water level drops, water would be released from bank storage (e.g., groundwater seepage). The amount of water released to the river would be a function of many variables, including soil type, antecedent moisture conditions, precipitation patterns, irrigation practices, etc. Because the change in depth of the New River produced by plant operations would be very small, accurately determining potential inflow from bank storage is not necessary, and groundwater replenishment of the river was not included as an ameliorating effect in the EIS (thus leading to a more conservative water analysis).	Section 4.2.4.1
	T. Hromadka further declares that the reduction in flow and increase in TDS for the New River would be within the historic range of variability for the New River and Salton Sea.	
	The calculations performed for this EIS support this declaration. As stated in the court decision, this reduction would lead to an overall decrease in the average flow for the New River. This decrease would be very small relative to prepower plant flows and small compared to the overall variability.	Sections 4.2.4.1 and 4.2.4.2

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Water Impacts	
O. Simoes, Intervenors	*O. Simoes declared that wastes from the power plant operations are processed at the plant into a solid waste that is then disposed of in a landfill.*	
	Calculations performed for this EIS indicate that operation of the power plants would reduce the annual loads of water quality parameters to the New River. For example, operation of both plants would reduce the annual TDS load to the New River by about 9 million lb (4 million kg). This reduction primarily occurs because less water would be delivered to the New River by the combined plants and the Zaragoza Oxidation Lagoons outfalls. Because of a decrease in flow in the river, its TDS would increase by up to 6%.	Section 4.2.4.1
J. Kasper, Intervenors	*J. Kasper declared that TDS removed during the treatment process at the LRPC is not returned to the New River.*	
	Calculations performed for this EIS indicate that operation of the power plants would reduce the annual TDS loads to the New River. For example, operation of both plants would reduce the annual TDS load to the New River by about 9 million lb (4 million kg). This reduction would primarily occur because less water would be delivered to the New River by the combined plants and the Zaragoza Oxidation Lagoons outfalls. Although the net load of TDS to the New River would be reduced, its TDS concentration would increase by up to 6%. Important TDS constituents for the New River are chloride, sodium, magnesium, calcium, carbonate, bicarbonate, nitrate, and sulfate. Although phosphorus is not listed as one of the salts of concern, it is a very important water quality parameter in terms of system eutrophication. Phosphorus reduction to the New River due to plant operations would be about 150,000 lb (68,000 kg) annually. *J. Kasper further declares that any changes in salinity of the Salton Sea attributable to plant operations would be entirely reversed if the flows from the New River are restored to their present levels.* All else being equal, this statement is correct, but not discussed in the EIS because salt would continue to flow into the Sea during the operational period of the power plants, and other activities would be taking place. The potential impacts of these and other activities are discussed under Cumulative Impacts (Chapter 5).	Sections 3.2.1.1, 4.2.4.1, and 5.4.2

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Water Impacts	
J. Nichols, Intervenors	*J. Nichols declared that a 0.14% increase in Salton Sea salinity after a year's time would have no adverse effect on aquatic organisms in the Sea.*	
	Calculations performed for this EIS indicated that the salinity of the Sea would increase by 0.14% due to a reduction in volume caused by a decreased inflow from the New River. After 1 year, an additional increase would occur due to continued salt inflow to the Sea. Impacts to organisms in the Salton Sea due to these increases could have adverse impacts to aquatic species, even before the critical level of 60,000 mg/L is reached (in an estimated 36 years).	Sections 4.2.4.2 and 4.4.4.3
	Declarations Related to Air Quality Impacts	
P. English, Plaintiff	*P. English declares that because the EA did not disclose levels of NH_3 emissions from the plants, and thus, the corresponding increases in PM_{10}, the EA's projected 24-hour average of 3 $\mu g/m^3$, underestimates the true cumulative impact from the pollutant.*	
	This EIS accounts for both direct PM_{10} emissions and PM_{10} concentrations produced by secondary formation in the atmosphere from conservative estimates of plant emissions of NH_3 and NO_x. The estimated maximum 24-hour concentration increase in the United States from direct emissions from both plants is 2.45 $\mu g/m^3$, while the estimated 24-hour contribution from secondary PM_{10} is 1 $\mu g/m^3$, which totals to less than the 5-$\mu g/m^3$ SL.	Section 4.3.4.4.2
W. Stockwell, Plaintiff	*W. Stockwell concurs with P. English, stating that maximum combined NH_3 emissions of the plants of 1,016 tons/yr (922 t/yr) pose a serious threat of irreparable environmental harm from the production of secondary PM_{10} from plant NH_3 emissions. He concludes that due to the relative presence of NO_x and NH_3 in the atmosphere in the vicinity of the plants, a substantial fraction of NH_3 emitted could form PM_{10} .*	

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Air Impacts	
	In the EIS analysis of secondary PM_{10} formation in the form of NH_4NO_3, it is concluded that power plant contributions would be controlled by NO_x emissions rather than NH_3 emissions and that the maximum 24-hour concentration increment would be 1 $\mu g/m^3$, as noted above. This estimate used a conversion factor of 0.6 grams of NH_4NO_3 formed for 1 gram of NO_x emitted from the plants, a value conservatively adapted from Stockwell et al. (2000) for winter-time conditions in the San Joaquin Valley to the north. This result is compared to a study by Chow and Watson (1995) that concluded that secondary NH_4NO_3 contributions from all sources to total PM_{10} in the border region were small, on the order of 2 to 3 $\mu g/m^3$. This EIS concludes that impacts of secondary PM_{10} from plant emissions would be de minimis.	Section 4.3.4.4.2
S. Heisler, Intervenors	*S. Heisler notes that while NH_3 is not a regulated air pollutant, estimated concentration increases from plant emissions can be compared to health-based reference values. He computed a 1-hour maximum concentration at the border of 13.4 $\mu g/m^3$ and an annual average of 0.63 $\mu g/m^3$ and compared these increases to California acute and chronic RELs of 3,200 $\mu g/m^3$ and 200 $\mu g/m^3$, respectively. On the question of contributions of plant ammonia emissions to secondary PM_{10}, Heisler further concludes that because the region is ammonia rich, plant emissions would not lead to significant formation of NH_4NO_3.*	
	This EIS also modeled the air concentration increases that would be produced from plant emissions of ammonia slip. Estimated maximum values for the proposed action are 4.05 $\mu g/m^3$ for 1-hour average and 0.061 $\mu g/m^3$ for annual average. These values are far below the EPA's reference concentration for chronic exposure of 100 $\mu g/m^3$ to which they are compared (Table 4.3-4).	Section 4.3.4
	Regarding formation of secondary PM_{10} from plant emissions of NH_3, this EIS likewise concludes that the region is NH_3 rich and that such formation would be controlled by plant NO_x emissions, as discussed above.	Section 4.3.4.4.2

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Air Impacts	
	S. Heisler, in a supplemental declaration, reports that computed total PM_{10} levels attributable to both plant direct emissions and secondary formation from ammonia slip are below EPA SLs at the border.	
	This EIS conducts a similar analysis, except that it is assumed that secondary PM_{10} formation is governed by plant NO_x emissions, rather than NH_3 emissions. This EIS also concludes that total PM_{10} contributions would be below SLs.	Section 4.3.4
P. Fontana, Intervenors	*P. Fontana calculated increases in NH_3 concentrations in air in the border region assuming worst-case emission rates from the power plants. He reported 1-hour acute values and annual averages that are both below chronic RELs. He further notes, as did S. Heisler in his declaration, that cooling tower NH_3 emissions, based on a calculation by J. Kasper, would be a small fraction of stack emissions of ammonia slip.*	
	The EIS analysis of direct NH_3 impacts is discussed above. Ammonia emissions from cooling towers are also assumed to be a small fraction of ammonia slip emissions.	Section 4.3.4
P. English, Plaintiffs	*P. English, in a supplemental declaration, argues that, irrespective of SLs, any increase in PM_{10} would have serious and irreparable health impacts from respiratory causes. He further asserts that it is "commonly accepted that there is a causal linear nonthreshold relationship between particulate matter with health outcomes." He then calculates such expected outcomes from plant impacts using factors he took from the scientific literature.*	
	This EIS acknowledges that increases in PM_{10} concentrations in the air basin could have adverse health effects in the way of respiratory illness. This EIS, however, does not attempt to compute the rates of any particular health outcomes, but defers instead to comparisons to SLs to gauge the magnitude of potential health impacts.	Sections 4.11.2 and 4.11.4

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Air Impacts	
T. Tesche, Plaintiffs	*T. Tesche notes that the Conformity Review requires that Federal actions conform to the provisions of the State Implementation Plan and meet the provisions of the Clean Air Act. He asserts that since the project is in a nonattainment area for O_3 and PM_{10}, a complete conformity analysis of these pollutants must be performed when emissions from the power plants are included.*	
	This EIS confines the discussion of conformity review to the transmission line projects. Estimates of PM_{10} and O_3 precursor emissions from these projects are below those triggering such a review and, therefore, this EIS concludes that the actions are exempt from further review.	Section 4.3.4.3
	T. Tesche notes that the EA did not include the two domestic Mexico turbines in the analysis of air quality impacts for NO_x and CO, and, moreover, relied on "simple screening calculations" using the EPA's ISCST3 model.	
	This EIS includes analysis of the two domestic Mexico turbines to evaluate cumulative impacts to air quality, including that from NO_x and CO. The EPA's most recent dispersion model, AERMOD, was used to model pollutants from the power plants. Such modeling would not be considered "simple screening calculations."	Sections 4.3.2 and 4.3.4
	T. Tesche asserts that the EA did not "perform any substantive analysis of impacts to O_3 levels in the air basin," noting that, while the EPA has not issued formal guidance on photochemical modeling of O_3 production, it has sponsored a large body of literature devoted to the proper application of such models. He identifies several state-of-the art photochemical grid models available in the public domain. He further takes issue with the EA's assertion that the plant emissions of NO_x would have minimal impact on O_3 levels in the U.S., saying this conclusion is "unsupported conjecture."	
	This EIS used EPA's OZIPR model to estimate possible incremental O_3 formation from plant emissions of NO_x and VOC. This model is a single-day, one-dimensional photochemical box model and is thus not a grid model as suggested by Tesche, but is considered adequate for the needs of the EIS.	Section 4.3.2.2.2

TABLE C-2 (Cont.)

Declaration Author and Affiliation	Summary of Issue and Resolution	Where Issue Is Addressed in the EIS
	Declarations Related to Air Impacts	
	T. Tesche agrees with the EA conclusion that the Salton Sea Air Basin is NO_x limited under most circumstances and notes that small additions of NO_x can have significant impacts on O_3 formation and dismisses the use in the EA of an annual average NO_x level in the analysis of O_3 impacts.	
	This EIS examined air chemistry conditions in the air basin, including hourly O_3 and NO_2 levels, and characterizes the Mexicali-Imperial County area as being VOC limited with respect to O_3 formation, rather than NO_x limited.	Section 4.3.4.4.2
B. Delany, Intervenors	*On the issue of emissions of the greenhouse gas CO_2 from the LRPC, B. Delany notes that there currently are no requirements to control or regulate emissions of CO_2 in either Mexico or California. He notes that the gas-fired turbines at the LRPC are low emitters of CO_2 per megawatt of energy produced and estimates that the LRPC would emit 1.24 million tons (1.12 million t) annually out of a global total of 26 billion tons (24 billion t).*	
	This EIS conservatively estimates CO_2 emissions to be 2.6 million tons/yr (2.4 million t/yr) each for the two export turbines and the two Mexico turbines at the LRPC. A global total of 25 billion tons/yr (23 billion t/yr) is cited for 2001.	Section 4.3.4.4.3

[a] Abbreviations: AERMOD = AMS/EPA Regulatory MODel; BOD = biochemical oxygen demand; CO = carbon monoxide; CO_2 = carbon dioxide; COD = chemical oxygen demand; DOI = U.S. Department of Interior; EA = environmental assessment; EIS = environmental impact statement; EPA = U.S. Environmental Protection Agency; ISCST3 = Industrial Source Complex Short Term Dispersion Model 3; LRPC = La Rosita Power Complex; NH_3 = ammonia; NH_4NO_3 = ammonium nitrate; NO_2 = nitrogen dioxide; NO_x = nitrogen oxides; O_3 = ozone; OZIPR = OZone Isopleth Plotting Package Research; PM_{10} = particulate matter with a mean aerodynamic diameter of 10 μm or less; REL = reference exposure level; SL = significant level; TDS = total dissolved solids; TSS = total suspended solids; USGS = U.S. Geological Survey; VOC = volatile organic compound(s).

APPENDIX C REFERENCES

Chow, J.C., and J.G. Watson, 1995, *Imperial Valley/Mexico Cross Border PM_{10} Transport Study*, *EPA Region IX*, Draft Final Report, Desert Research Institute (DRI) Document No. 8623.2D1, April 21.

Stockwell, W., et al., 2000, "The Ammonium Nitrate Particle Equivalent of NO_x Emissions for Wintertime Conditions in Central California's San Joaquin Valley," *Atmospheric Environment* 34:4711–4717.